<u>IN THE SPECIFICATION</u>

Please replace the paragraph beginning at line 9 on page 1 with the following:

The present invention relates to an integrated system and method for importation, extraction, cleansing, aggregation, creation, management, transmission, taxonomy assignment, analysis and publishing of content-centric electronic catalogs, e-catalogs, or enterprise data that seamlessly integrate catalog content from potentially multiple sources for searching, analysis, and maintenance by multiple ~~Users~~ users. More particularly, this invention relates to system and method employing a content-centric framework comprising an open and fully extensible schema for the creation, management and publishing of online e-catalogs of products and services from potentially multiple internal and external sources. Most particularly, the present invention relates to a content framework or schema of pre-defined product and service classifications and workflow rules for the creation and management of catalog content. Such content can be readily customized to incorporate proprietary and legacy data in order to create, manage, publish and syndicate to e-catalogs from potentially many sources for use by potentially many ~~Users~~ users.

Please replace the paragraph beginning at line 22 on page 1 with the following:

One of the most critical components of any purchasing or selling process, or online or e-business strategy is the electronic catalog of products and services utilized for buy and sell side applications, sourcing, and inventory control and ERP systems. If items are not represented properly in an electronic catalog, any system employing the catalog can be rendered useless and frustrate ~~Users~~ users.

Please replace the paragraph beginning at line 27 on page 1 with the following:

Existing supplier catalogs typically comprise industry and supplier specific technical terms and jargon as well as standard and ad hoc abbreviations, usually in the form of keywords and short item descriptions. Relationships between products and the type of domain they are commonly associated with, most often have been overlooked in prior art product classification schemes and search engines intended to guide ~~Users~~ users to products they seek. Almost every searcher using such systems has experienced the frustration of repeatedly trying to locate an item

AMENDMENT

U.S. Appl. No. 10/705,923
Page 4

in such a catalog and not being able to locate the item because it is been associated with keywords or concepts not familiar to the searcher and no framework was available to guide the searcher.

Please replace the paragraph beginning at line 13 on page 2 with the following:
These problems with existing catalogs and their search engines, and historical data, cannot be alleviated by standardization alone. Item descriptions, keywords, concepts, and families of goods and services that have been well established by suppliers and industries and should be the basis for guiding searches as well as for storing items for retrieval, must somehow be captured and used as templates for developing a catalog of products and services that helpfully guides ~~Users~~ users to the items they seek.

Please replace the paragraph beginning at line 19 on page 2 with the following:
Quality of catalog content directly impacts the effectiveness of buy and sell-side processes and related data processing applications, as well as traditional ERP systems. The information stored within a catalog is only useful if it can be found and can be related to internal data processing programs and the enterprise's policies and procedures. If content is of poor quality, end ~~Users~~ users will tend to not use their systems and resort to maverick (i.e., off-contract) spending (in the case of a procurement application). In such a scenario, any benefit of price discounts, strategic sourcing, vendor contract compliance, vendor performance measurement, and other cost of ownership are lost. Furthermore, the accuracy of an enterprise's financial reporting and financial statements can be impaired by the miss-categorization of fixed assets, consumables, services, or other categories.

Please replace the paragraph beginning at line 5 on page 3 with the following:
Thus, there is a need for an end-to-end solution, process, and services which facilitates a rich content data repository of product/supplier data of the highest possible quality, that adapts to and reflects the descriptive nuances of products available from individual suppliers and that relates them to industry standards and to supplier and buyer business practices, in order to provide a

satisfactory search in a procurement setting, so that the ~~User~~ <u>user</u> finds what is wanted, is able to compare attributes, vendor terms and conditions, prices, availability, options, replacement parts, verify contract terms and conditions and all other details related to the product or vendor, and the goals of the procuring organization are not compromised. The present invention provides the best quality content for e-catalogs, content that is rich in its variety of features while being both descriptive and intuitive from a ~~User~~ <u>user</u> perspective, and in addition supports buyer and seller business practices and industry and manufacturers' standards for technical information The present invention provides flexible technology which allows integration with multiple internal and external parties and systems. Such a repository centers on an e-catalog that maintains a high degree of congruence with an organization's business and procurement goals by focusing on meeting every searcher's needs while supporting an organization's business practices.

Please replace the paragraph beginning at line 8 on page 4 with the following:

In one aspect, the present invention provides a system and method for building a rich content repository centering on an e-catalog of products and their vendors where the product and vendor input data can be provided by one or more product suppliers in as many industries and can be in many different legacy formats. This invention is a system and method for rich content creation and maintenance that uses a knowledge base of patterns for categorizing goods and services into families described by a common language generator or CLG. This invention aggregates the syntax and semantics of at least one product supplier's database, data, and administration processes and transforms them into a normalized form or pattern which is then used to define, populate, and administer an e-catalog database with data imported from at least this one product supplier's legacy database(s). The present invention is a rich content creation and management system and method that provides ~~Users~~ <u>users</u> with the ability to:

Please replace the paragraph beginning at line 6 on page 5 with the following:

The ~~User~~ <u>user</u> view of the workflow work process management aspect of the system and method of the present invention is described in Appendix III.

Please replace the paragraph beginning at line 8 on page 5 with the following:

The ~~User~~ user view of the data syndication aspect of the system and method of the present invention is described in Appendix IV.

Please replace the paragraph beginning at line 10 on page 5 with the following:

The ~~User~~ user view of the import of an external schema aspect of the system and method of the present invention is described in Appendix V.

Please replace the paragraph beginning at line 12 on page 5 with the following:

The ~~User~~ user view of the schema management aspect of the system and method of the present invention is described in Appendix VI.

Please replace the paragraph beginning at line 19 on page 5 with the following:

Data Aggregation activity consists of importing, standardizing and validating incoming content data. It also covers the import of schema files and their inclusion as appendages to specified branches of the existing schema, as well as historical data from accounting and procurement systems that may be processed for strategic spending analysis, vendor contract compliance, scope analysis, and to develop business processes, policies and procedures relating to both the Invention as well as internally for the ~~User's~~ user's enterprise.

Please replace the paragraph beginning at line 1 on page 8 with the following:

Catalog Administration involves definition and maintenance of critical administrative information on individual catalogs. These include User and Group profiling, price markup definition, product view definition, authorizations, formatting, syntax, and other attributes as may be required by ~~Users~~ users or enterprises.

Please replace the paragraph beginning at line 5 on page 8 with the following:

The catalogs can be "Published" to the Catalog Browser Web Application or any electronic data processing system which can accept such data, or can be "Syndicated" to ~~Users~~

<u>users</u> and customers, or can be viewed in various electronic and paper reports and analysis.

Please replace the paragraph beginning at line 26 on page 10 with the following:

The present invention is a system and method for rich content creation and management based on the Vendor Portal illustrated in FIG. 2. It is based on a Content Engine ~~201~~ 203 and data framework comprising an open and fully extensible schema. The system and method of the present invention provides owners a Supplier Portal to self-author 200 their rich content into a Content Portal or offers them a Content Engine ~~201~~ 203 having the required services to participate in a Content Portal. The Content Engine ~~201~~ 203of the present invention provides full integration with customer's (owners, vendors, buyers) existing applications and systems. As shown in FIG. 1, suppliers and owners are supported by a Content Portal with syndication services 111 to other eCommerce communities. Appendices III-V provide ~~User~~ user views of workflow, syndication, and schema import aspects of the present invention whose functional capabilities are described in the following sections.

Please replace the paragraph beginning at line 18 on page 12 with the following:

• Select Incoming Schema File: The ~~User~~ user specifies the file name, file location and type (MS Access, XML, CSV or MS Excel) of the incoming file. The ~~User~~ user also specifies the project for which the incoming schema has to be imported. The contents of the specified file are read and imported as a temporary table into the standard database.

Please replace the paragraph beginning at line 22 on page 12 with the following:

• Map Incoming Schema File: The incoming schema is mapped against the standard schema structure. A field-to-field mapping is established between the incoming schema file and the standard schema file. The ~~User~~ user can save this mapping as a template for reuse. The referencing values of the schema can be preserved for retaining the association that the incoming schema may have with an item file.

Please replace the paragraph beginning at line 27 on page 12 with the following:

• Append Incoming Schema: The mapping process generates a tree-like structure of the incoming schema similar to the standard schema structure. The ~~User~~ user compares and appends the incoming classes to a specified class of the existing schema definition.

Please replace the paragraph beginning at line 1 on page 13 with the following:

• Synonym Import: The import schema process enables import of class synonyms based on ~~User~~ user selection. The ~~User~~ user specifies the file containing the synonyms associated with the schema file that is being imported.

Please replace the paragraph beginning at line 8 on page 13 with the following:

• Select Incoming Item File: The ~~User~~ user specifies the file name, file location and type (MS Access, XML, CSV or MS Excel) of the incoming file. The ~~User~~ user also specifies the project for which the incoming data has to be imported. The contents of the specified file are then read and imported into the standard database as a temporary table.

Please replace the paragraph beginning at line 13 on page 13 with the following:

•Define Validation Rules: The ~~User~~ user defines rules for validating incoming data. Rules can be defined for each field of the incoming item data. The riles are created around a set of standard operators like "mandatory/null" values, "equal to", "greater than", "less than", etc. The ~~User~~ user can specify an operator and a corresponding value, if applicable.

Please replace the paragraph beginning at line 18 on page 13 with the following:

• Map Incoming Item Files: The incoming item details are mapped within the standard rich content database structure. A field-to-field mapping is established between the incoming content file and the standard rich content database. The ~~User~~ user can save this mapping as a template for reuse.

Please replace the paragraph beginning at line 22 on page 13 with the following:

- Extract Specified Characters: The data is cleansed before import by defining characters that should be removed from incoming data. Previously defined characters can be re-used in subsequent import processes. The ~~User~~ user specifies the fields from which to extract and remove predefined characters.

Please replace the paragraph beginning at line 26 on page 13 with the following:

- Replace Words: The ~~User define~~ user defines words that are searched for and replaced with ~~User~~ user -specified words. This "find and replace" function is applied to all the fields specified by the ~~User~~ user.

Please replace the paragraph beginning at line 1 on page 14 with the following:

- Validation Report: A list of valid and invalid items in the incoming process is displayed to the ~~User~~ user. Details of errors are also provided against each invalid item. The ~~User~~ user can selectively import the incoming items to avoid invalid items. The ~~User~~ user is presented with a list of items among the incoming items that contain the specified characters. The ~~User~~ user can select individual items or multiple items for removal of characters. The characters are removed only from the items specified by the ~~User~~ user.

Please replace the paragraph beginning at line 7 on page 14 with the following:

- Select Associated Schema: A list of previously loaded incoming schema files is presented to the ~~User~~ user. The ~~User~~ user selects a schema file from this list. The incoming items are automatically classified according to their association with the classes of the selected schema file. All items that are classified are available for processing in the "Value Extraction" stage. A list items that could not be classified is presented to the ~~User~~ user to take appropriate action.

Please replace the paragraph beginning at line 13 on page 14 with the following:

- Pre Marked Actions: The system automatically detects the records that are pre-marked for action i.e. the incoming items have the "Supplier Action" field populated. The ~~User~~ user is

presented with a report of the changes the system commits based on the pre-marked actions. An option to view the report in a printer-friendly format is provided. The ~~User~~ user confirms the changes or override them. The following changes are committed based on the value in a "Supplier Action" field:

Please replace the paragraph beginning at line 10 on page 15 with the following:

• Delta Analysis: All items selected for import can be compared for delta changes with existing items in specified schema locations. The ~~User~~ user specifies corresponding fields in the incoming file and the standard content structure to enable the search. The specified fields can be a combination of two fields e.g.: manufacturer part number and manufacturer.

Please replace the paragraph beginning at line 18 on page 15 with the following:

• Append Items: For new incoming items, the ~~User~~ user specifies the items that need to be imported. All selected items are assigned unique product identifiers. This is available for further processing as the "identification stage". The "Supplier Action" field of the appended items are populated with the value "ADD".

Please replace the paragraph beginning at line 22 on page 15 with the following:

• Overwrite Items: For item numbers that are common to both incoming and existing data, the ~~User~~ user can view details of differences or changes. The change report shows a field-by-field comparison of the incoming item and existing item. The ~~User~~ user selects an option to append the item as a new item or to overwrite existing items. Overwritten items are sent back to "identification stage". The "Supplier Action" field of the appended items is populated with the value "UPD".

Please replace the paragraph beginning at line 3 at page 16 with the following:

• Classify Items: All successfully imported items that were not classified during the import process are presented to the ~~User~~ user along with the catalog schema tree for classification. The ~~User~~ user can automatically classify items within the schema. Auto-classification is performed on

the basis of existing patterns associated with specific class attributes using a "voting algorithm". Optionally the ~~User~~ user can manually classify incoming items under specified classes of the project using "drag and drop" or "force class" actions. All items are now ~~be~~ available for the next stage.

Please replace the paragraph beginning at line 2 on page 21 with the following:

-For managing content in a collaborative, multi-~~User~~ user, multi-catalog environment, a "project" is defined per catalog. Upon creating a "project", the classification schema for the project can be defined as classes and sub-classes under it. Each class is defined in terms of attributes. A class inherits attributes from its parent. A set of GUI Screens is available to perform schema definition and maintenance functions.

Please replace the paragraph beginning at line 7 on page 21 with the following:

• Define Project: To manage a customer's data, the ~~User~~ user defines a project. Thus each project represents a customer. All the existing projects are shown as nodes of the same tree. This tree interface is used to add new projects. Thus all first-level children under the root of this tree are "projects". The classification schema of items for the project is defined as sub-classes of the project node. Only classes can be defined under a project. Only classes can be defined under a class.

Please replace the paragraph beginning at line 13 on page 22 with the following:

• Define Class & Class Attributes: For a project, the ~~User~~ user creates classes that represent the classification schema for items. Each class can have up to 30 attributes inclusive of inherited ones. Attributes can be selected from a global pool of attributes or the ~~User~~ user may define them. Every attribute defined by the ~~User~~ user is also made available in the global pool thereafter. A list of possible values for an attribute can be defined. These values are available during value extraction, enrichment and QA stage. User can select value from this list or can add, edit or delete values from this list. The addition is submitted for approval before it is reflected in the schema.

Please replace the paragraph beginning at line 21 on page 21 with the following:

•   Attribute Inheritance: A class automatically inherits the attributes of its parent. A class can have a maximum of 30 attributes, inclusive of its inherited attributes. On copying a class to place it under some other class, only the non-inherited attributes of the class (which is being copied) are copied. The new class thereupon inherits attributes from its new parent. If duplicate attributes for the new class are created as a result of this, the ~~User~~ user is notified of this during the copy operation itself, and the duplicate attribute is copied into the new class. The ~~User~~ user can take appropriate actions for duplicate attributes, if required.

Please replace the paragraph beginning at line 29 on page 21 with the following:

•   Edit Class Attributes: The ~~User~~ user can modify an attribute of a class. New attributes can be added to an existing class. Existing attribute information can be modified or the attribute can be deleted. On adding an attribute or editing/deleting an existing one of a class, the ~~User~~ user is notified of the impact his activities may have on existing items under that class. The change is submitted for approval before it is reflected in the schema.

Please replace the paragraph beginning at line 6 on page 22 with the following:

•   Copy/Move Classes and Items: Child classes of a class (of any project) can be copied or moved to another class (of any project). Copying or moving a class also copies or moves all the items under that class along with it. The ~~User~~ user may also explicitly select items under a class and copy/move only them to some other class. These changes are submitted for approval before they are reflected in the project. Items reflect their new parent class after approval.

Please replace the paragraph beginning at line 12 on page 22 with the following:

•   Delete Catalog Schema (Classes): Users having appropriate authorizations can delete a class from any project. All the sub-classes under that class are also deleted. Similarly all the items under each class under that class are also deleted. Before any deletion, the ~~User~~ user is prompted. Only if the ~~User~~ user wishes to proceed, is the deletion carried out. If an item from this set is

maintained under multiple classes, associations to all classes other than the deleted class and all its descendant classes are retained. The deletion is submitted for approval before it is reflected in the schema.

Please replace the paragraph beginning at line 13 on page 23 with the following:

• Select Project: To enhance incoming data, the ~~User~~ user first needs to select a project from a list of existing projects. Once a project is selected, a list of all load events is presented to the ~~User~~ user. From this list, the ~~User~~ user can select one or more load events to build descriptions for the items imported during the load event(s).

Please replace the paragraph beginning at line 17 on page 23 with the following:

• Build Descriptions: Imported content may be enhanced to enable better classification and value extraction. The ~~User~~ user can build rich descriptions for an item. The ~~User~~ user can add attributes to the item along with their values. However, these attributes are not retained. They become a part of the description itself and are meant only to enrich it. They are not meant to exist separately as "attributes" at this point.

Please replace the paragraph beginning at line 22 on page 23 with the following:

• Normalization: Normalization features like "spell-check" and "find/replace" can be used to normalize the description. The "spell-check" utility also allows the ~~User~~ user to customize the dictionary. Users can add specific acronyms and abbreviations to the custom dictionary, which upon approval are ignored during spell check. The "find and replace" feature can be executed for a selected item or a set of items on specified fields. The case of text in text fields are changed during editing or adding an item. Manufacturer and Supplier names can be spell checked against those already added to the database tables. Only correctly spelled ones are accepted. After normalization, the item can be moved to QA and thus made to bypass CLG processing.

Please replace the paragraph beginning at line 13 on page 24 with the following:

- Define Global Patterns: For a global attribute, a pattern can be defined. This pattern then is designated as a global pattern, although it is only associated to that particular global attribute. Users can submit a pattern created for an attribute or a class to be designated as global. These submissions, seeking to promote a pattern, as a "global" pattern must be approved. On approval, patterns get associated to the global attribute. Global patterns are used while processing items under classes having the respective the corresponding global attribute. The ~~User~~ user selects the global attribute and defines incoming and outgoing strings for defining the global pattern. The ~~User~~ user can select a word, right click and filter containing or not containing the selected word.

Please replace the paragraph beginning at line 27 on page 24 with the following:

- Apply Pattern to Attribute: Patterns are associated to an attribute. Thus for an attribute, the ~~User~~ user can define more than one patterns. The patterns of all the attributes of a class are collectively compared against the description of an item.

Please replace the paragraph beginning at line 5 on page 25 with the following:

Incoming items have to be classified under appropriate classes of the intended project. The classification can be done manually or the ~~User~~ user can choose the automatic mode, wherein through pattern matching, the items get classified to their "most likely" respective classes.

Please replace the paragraph beginning at line 10 on page 25 with the following:

- Select Items: All unclassified items imported under this project are presented to the ~~User~~ user. The items are presented to ~~User~~ user as group of classes. Filtering to locate a specific set of items, based on import event, is provided. The ~~User~~ user can select items from single or multiple import events. Multiple filters are provided to filter similar products. The ~~User~~ user can select a word, right click and filter containing or not containing the selected word. Items can be sorted by single or multiple columns. The ~~User~~ user has to checkout items from this list to classify them. Users can checkout a specific percentage of items in a project. Checking-out items ensures that ~~User~~ user do not step on each other's work. On checking-out items, the ~~User~~ user is shown the list

of items he has checked-out and the classification schema of the project in a tree interface. The ~~User~~ user can view checked out items in a table grid or an HTML grid. Users can define fields they wish to view or work with in an HTML grid. During classification, the ~~User~~ user can add, delete, rename and move classes. Three methods are available for classification: Drag and Drop, Force Class and Interpret.

Please replace the paragraph beginning at line 24 on page 25 with the following:

• Build Patterns for Classification: To enhance classification, the ~~User~~ user can build patterns before classifying an item. He can associate the patterns with the attribute(s) of the class (es) which the ~~User~~ user thinks best approximates the class for the item. A drag and drop feature is provided to associate a pattern with an attribute or a class. Any pattern created by the ~~User~~ user can be nominated to become a global pattern. Regardless of whether it is approved to be as such, it is associated with the class attribute and used in the voting algorithm for that class.

Please replace the paragraph beginning at line 2 on page 28 with the following:

Build Patterns & Value Extract: All the fields of an item can be viewed to build patterns. A pattern builder is provided that enables specifying incoming and outgoing strings for the pattern. A pattern can be nominated for promotion as a global pattern. A pattern does become global unless it is approved. However, that pattern is still applied to the class on whose attribute it was defined. Any pattern created needs to be associated with an attribute. The drag and drop feature is provided to associate a pattern with an attribute or a class. On selecting the "Value Extract" button, based on the previously built patterns and the newly created ones, for the class lineage of the item, the values for the attributes are mined from the description and assigned to the item. However patterns need not be necessarily built to do value extraction. Only existing patterns can be used. The results of the value extraction are displayed to the ~~User~~ user. Thus all the possible attributes and their values are displayed.

Please replace the paragraph beginning at line 14 on page 28 with the following:

• Send Item Back: A ~~User~~ user may send back an item for re-classification if the value extraction results are not satisfactory. Sending back an item for classification means that on re-classification of the item, a different set of patterns is applied to do value extraction, in the hope of obtaining better attributes and values for the items.

Please replace the paragraph beginning at line 18 on page 28 with the following:

Normalize Value Extracted Data: Upon value extraction, items of a class having the same attribute may or may not have the same values for the same attribute, though the values may semantically convey the same meaning. A ~~User~~ user can normalize the values of these attributes by the use of the Electronic Format form wherein the distinct values of an attribute of a class (as extracted from all the items of that class having that attribute) are presented to the ~~User~~ user. The ~~User~~ user can view all items that have a specific attribute value. The ~~User~~ user can decide if these different values need normalization or they need to retain their different values. The ~~User~~ user can define patterns to normalize the existing attribute values.

Please replace the paragraph beginning at line 2 on page 29 with the following:

Synonyms are alternate words that are used for identifying a class or an item in a full text search. During a full text search the ~~User~~ user inputs a string or pattern that is evaluated against these synonyms. The classes and items whose synonyms match the search string/pattern are included in the search result.

Please replace the paragraph beginning at line 12 on page 29 with the following:

Search Using Synonyms: The ~~User~~ user can input a string or a pattern when searching for a class. This string or pattern is matched against the synonyms of all the classes and wherever matches occur, those classes are included in the search result.

Please replace the paragraph beginning at line 16 on page 29 with the following:

Item Management involves deletion/modification of items that are marked as "Ready For Enrichment" and editing details of existing items. The Item Maintenance is allowed to operate only on items whose status is "Ready For Enrichment". Associations between identical items under different classes can also be defined during the maintenance process. The ~~User~~ user manually changes the status of these items to "Ready For QA".

Please replace the paragraph beginning at line 34 on page 23 with the following:

Edit Rich Content Item: The ~~User~~ user navigates the classification structure. The ~~User~~ user selects an appropriate class. The list of existing items under the selected class is presented to the ~~User~~ user. The ~~User~~ user selects the item to be modified. The ~~User~~ user populates/modifies item details. The ~~User~~ user uploads/changes the image for the item. Thumbnails for the image are generated automatically. The ~~User~~ user can also attach or remove PDF files, documents, text files or images to/from the item. Attachments can be shared among items. A maximum of five attachments is permissible. This modified item remains marked as "Ready For Enrichment".

Please replace the paragraph beginning at line 4 on page 30 with the following:

Define Item Association: The ~~User~~ user is allowed to associate an item with multiple schema classes. An item under a class of a project may be associated with any class of any project. An item associated with multiple classes is accessible from all associated classes. The reference of all associating classes is stored against the item.

Please replace the paragraph beginning at line 8 on page 30 with the following:

Define Currency Formats: The ~~User~~ user "defines currency formats" for each currency. The ~~User~~ user specifies the currency code, name, symbol, prefix, suffix, thousand separators, decimal separator and decimal precision to be used to format amounts of the stated currency. The ~~User~~ user modifies or deletes existing currency formats based on specific requirements.

Please replace the paragraph beginning at line 14 on page 30 with the following:

In order to provide a shopper a comprehensive purchasing opportunity, accessories for an item can be defined with the aim of displaying an item together with its accessories r to the shopper in the Catalog Browser. For an item of a project, the ~~User~~ user can identify items that serve as accessories for the item. This accessory relationship can be qualified further. The ~~User~~ user can also edit the list of accessories defined for an item--some accessories may be dropped from the list, or new ones may be added.

Please replace the paragraph beginning at line 20 on page 30 with the following:
Select Class: The ~~User~~ user selects a class from a project. On selecting a class, all the items with status "Ready For Enrichment" under it are displayed and made accessible for defining accessories.

Please replace the paragraph beginning at line 23 on page 30 with the following:
Select Item: The ~~User~~ user selects an item for which accessories are to be defined.

Please replace the paragraph beginning at line 24 on page 30 with the following:
Define Accessories: The classification schema of the project is presented to the ~~User~~ user, upon selecting an item. Clicking on any class of this tree causes the display of all the "Ready For Enrichment", "Ready For QA" and "Ready For Shipping" items under it. The ~~User~~ user can select specific items from this tree as accessories to the selected item. The ~~User~~ user can also define the specific type of association (Component, Cross-Selling, Accessory, Replacement Part) and the quantity of the accessory item.

Please replace the paragraph beginning at line 2 on page 31 with the following:
Edit Accessories: Similarly, the ~~User~~ user can select an item from the tree view and modify its accessory list or delete accessory associations.

Please replace the paragraph beginning at line 7 on page 31 with the following:

Select Project: The ~~User~~ user selects the specific project to be QA-ed.

Please replace the paragraph beginning at line 8 on page 31 with the following:

Select Items for QA: On selecting any class, the class attributes and their corresponding values are displayed to the ~~User~~ user. The User user selects a specific attribute value. The number of items matching the attribute value are displayed. The ~~User~~ user can filter the displayed items based on defined criteria. The ~~User~~ user can navigate to the details of any item from the list of matched items.

Please replace the paragraph beginning at line 13 on page 31 with the following:

Search Catalog: Alternatively, the ~~User~~ user can search the catalog for specific keywords and navigate to the list of successfully searched items.

Please replace the paragraph beginning at line 15 on page 31 with the following:

Validate Item: The ~~User~~ user then selects individual items and views them. Individual items or a set of items can be approved, edited or sent back to earlier stages.

Please replace the paragraph beginning at line 19 on page 31 with the following:

Audit Reporting: All content-related activities, including rework are tracked and are presented to the ~~User~~ user as reports.

Please replace the paragraph beginning at line 22 on page 31 with the following:

The User user can keep a track of items present in CLG and their current status in terms of processing. Thus the ~~User~~ user can know how many items are pending classification and value extraction. The details about these items such as their import event ids (if they were imported), the ~~Users~~ users who imported/created them etc can be accessed by the ~~User~~ user.

Please replace the paragraph beginning at line 26 on page 31 with the following:

List of Items Stage-Wise: The ~~User~~ user can know how many items remain unclassified, how many are pending value extraction. This allows the ~~User~~ user to take actions on unprocessed items. Filters are provided to specify a set of items based on project or import load event or creator ~~User~~ user etc. An option to view the report in a printer-friendly format is provided.

Please replace the paragraph beginning at line 4 on page 32 with the following:

Rework Items: The ~~User~~ user can also view those items that have been sent back for rework. These include those items sent back for classification or for value extraction. Filters are provided to specify items. An option to view the report in a printer-friendly format is provided.

Please replace the paragraph beginning at line 8 on page 32 with the following:

Discontinued Items: The ~~User~~ user can view the items that have been marked as "Discontinued" based on the expiry date and supplier action fields. The ~~User~~ user can view details of each "Discontinued" items. The ~~User~~ user can apply Filters to filter the view. The ~~User~~ user takes appropriate action based on the report. An option to view the report in a printer-friendly format is provided.

Please replace the paragraph beginning at line 14 on page 38 with the following:

User profiling includes defining/editing/deleting of a ~~User~~ user group and individual ~~User~~ user. User groups are defined based on the common functions assigned to a set of ~~Users~~ users. Individual ~~Users~~ users are always associated to a ~~User~~ user group. Users are authorized personnel using the system to create and manage or browse rich content. GUI Screens are provided to maintain and define ~~Users~~ users and ~~User~~ user groups.

Please replace the paragraph beginning at line 19 on page 38 with the following:

• Define User Group: A tree-view of available projects/catalogs and the available functions (GUI screens) are presented to the ~~User~~ user. A ~~User~~ user group is defined by selecting projects/catalogs and system functions to be accessed by Users of the group. For ~~User~~ user groups having access to functions in Catalog Maintenance or Navigator (Catalog Browser WEB

application), the ~~User~~ <u>user</u> selects the product views applicable for the ~~User~~ <u>user</u> group. Each ~~User~~ <u>user</u> group can be associated with multiple projects/catalogs and one product view per project/catalog. Product views are snapshots of the catalogs. For ~~User~~ <u>user</u> groups having access to Navigator, the ~~User~~ <u>user</u> can select the markup values applicable to the group while calculating price. The ~~User~~ <u>user</u> can also select an "Enable Request For Quote (RFQ) for Non-Available Items" option. This option enables/disables the ability to request a quote for non-available items while shopping.

Please replace the paragraph beginning at line 4 on page 39 with the following:

• User Management: Separate screens allow definition and maintenance of ~~Users~~ <u>users</u>. The ~~User~~ <u>user</u> -id, name, password, email address and the ~~User~~ <u>user</u> -group are defined for a User. A ~~User~~ <u>user</u> can be associated with multiple ~~User~~ <u>user</u> groups. The ~~User~~ <u>user</u> is able to switch between ~~User~~ <u>user</u> groups without performing re-login. An option to view the list of ~~User~~ <u>user</u> in a printer-friendly format is provided.

Please replace the paragraph beginning at line 12 on page 39 with the following:

• Product View Definition: A screen is provided for defining product views. The User <u>user</u> specifies a project and then select classes and individual items within the selected classes for the product view.

Please replace the paragraph beginning at line 17 on page 39 with the following:

• Class Level Markup: To define a Class Level Markup, the ~~User~~ <u>user</u> selects the Project and a Product View for the project. Markups for available classes are defined.

Please replace the paragraph beginning at line 2 on page 40 with the following:

• Item Level Markup: To define an Item Level Markup, the ~~User~~ <u>user</u> selects the Project and Product View for the project. Markups are defined for specified items belonging to available classes within the product view.

Please replace the paragraph beginning at line 5 on page 40 with the following:

- Promotional Price Definition: Separate screens are provided to the ~~User~~ <u>user</u> to define Promotional Price at item, level. The ~~User~~ <u>user</u> selects the items of the selected Product View within the Project. Promotional Prices can be defined for each item within the Product View. The ~~User~~ <u>user</u> specifies the validity period for the promotional price.

Please replace the paragraph beginning at line 9 on page 40 with the following:

- Quantity Based Pricing Definition: A separate screen is provided to the ~~User~~ <u>user</u> to define Quantity Based Pricing for each selected item within the Product View. The ~~User~~ <u>user</u> selects an item, enter the effective and expiry date of the discount, enter the quantity range and a corresponding discounted price for the range. The ~~User~~ <u>user</u> can define the Quantity Based Pricing without any time limit.

Please replace the paragraph beginning at line 17 on page 40 with the following:

- The ~~User~~ <u>user</u> adds/edits/deletes Manufacturer and Supplier. The Supplier and Manufacturer Names are used for validating Supplier and Manufacturer information of an item.

Please replace the paragraph beginning at line 19 on page 40 with the following:

- Add Manufacturer: The ~~User~~ <u>user</u> can add a new manufacturer. The ~~User~~ <u>user</u> uploads a logo for the manufacturer. Existing logos can be updated or deleted.

Please replace the paragraph beginning at line 21 on page 40 with the following:

- Add Suppliers: The ~~User~~ <u>user</u> can add a new supplier. The supplier information is used while validating the supplier names in item information. A separate screen is provided to define the field names for supplier. The ~~User~~ <u>user</u> defines the field names (E.g. "Address", Email ID", "DUNS No", etc) and specifies whether the fields are mandatory. The ~~User~~ <u>user</u> populates the field names for each supplier while adding new suppliers.

Please replace the paragraph beginning at line 27 on page 40 with the following:

- Display Manufacturers: The ~~User~~ user is presented with a list of manufacturers for reviewing purposes. An option to view the list of suppliers in a printer-friendly format is provided.

Please replace the paragraph beginning at line 2 on page 41 with the following:

- Display Suppliers: The ~~User~~ user is presented with a list of suppliers for reviewing purposes. An option to view the list of suppliers in a printer-friendly format is provided.

Please replace the paragraph beginning at line 6 on page 41 with the following:

- The items that are "Ready for Shipping" are flagged as "Shipped" and made available for publishing, syndication or maintenance. The ~~User~~ user selects a project. The ~~User~~ user selects items to be flagged as "Shipped". The items are then marked as "Shipped". Items once flagged as "Shipped" are available to CLG.

Please replace the paragraph beginning at line 10 on page 41 with the following:

- Select Project: The ~~User~~ user selects a project from a list of projects.

Please replace the paragraph beginning at line 11 on page 41 with the following:

- Select Items: The ~~User~~ user selects items that need to be marked as "Shipped". These items are in the "Ready For Shipping" stage.

Please replace the paragraph beginning at line 13 on page 41 with the following:

- Ship Items: The ~~User~~ user marks these items as "Shipped". These items are ~~be~~ available in CLG for processing.

Please replace the paragraph beginning at line 21 on page 41 with the following:

- Select Catalog: The ~~User~~ user selects a catalog from which items need to be sent back to CLG.

Please replace the paragraph beginning at line 23 on page 41 with the following:

- Select Items: The ~~User~~ user navigates the classification schema and selects required items that are to be sent back to CLG. The items with the status as "Maintained" are not displayed. When the ~~User~~ user is the Administrator, the "Maintained" items are displayed with a flag that they are "Maintained". The selected items are sent back to CLG.

Please replace the paragraph beginning at line 9 on page 42 with the following:

- Define Approval Levels: The ~~User~~ user defines approval levels that are used while approving "Catalog Change Submissions". The ~~User~~ user sets the "Respond by Time Limit" for each approval level. The "Respond By Time Limit" is the maximum time difference between the submission notification to approver and the approval by the Approver. The ~~User~~ user defines one Approver for each approval level who approves submissions for only one catalog.

Please replace the paragraph beginning at line 15 on page 42 with the following:

- Edit/Delete Approval Levels: The ~~User~~ user is presented with a list of approval levels and associated approvers and relevant catalogs. The ~~User~~ user edits the approval level definition or deletes the approval level.

Please replace the paragraph beginning at line 18 on page 42 with the following:

- View Approval Levels: The ~~User~~ user is presented with a list of approval levels and associated approvers and relevant catalogs for viewing purpose.

Please replace the paragraph beginning at line 21 on page 42 with the following:

- All changes to the "Shipped" Items & Classes are "Submitted" for approval before they are reflected. "Catalog Change Submissions" are approved/rejected by the User (Approver). The submission is then moved to the next level of approval until the Final Approval is done. The "Catalog Administrator" manages the entire catalog approval. The Catalog Administrator is the super ~~User~~ user for a specific catalog/project.

Please replace the paragraph beginning at line 15 on page 43 with the following:

• Search Catalog: The User (Approver) can search the catalog for specific keywords. Based on search results, the ~~User~~ user select a class and views the existing submissions for approval. The ~~User~~ user can then approve/reject the submission.

Please replace the paragraph beginning at line 18 on page 43 with the following:

• Submission Approval/Rejection: The User (Approver) approves or rejects the submissions. On approval the submission moves to the next level of approval. The Approver for the catalog at the next approval level is notified. The submission to the approver in the Final Approval Level is effected in the catalog/project. Schema changes that are approved in the Final Approval Level are reflected in the catalog/project. The ~~User~~ user who submitted the "Content Change Submission" is notified when the submission has been approved in the Final Approval Level. The User (Approver) can reject the submission at any level. The rejected submissions are sent back and the changes reverted. The originator of the submission is notified via email of the rejection. The User (Approver) adds a comment against the rejection that is appended to the email. When the submission is an item, the status of item is changed back from "Maintained" to "Shipped" on rejection (unless it was "Maintained" originally). On approval of a submission for an item the item retains its status of "Maintained" and is available for publishing, syndication and maintenance.

Please replace the paragraph beginning at line 12 on page 44 with the following:

• Select Catalog to Publish: The ~~User~~ user selects the catalog to be exported.

Please replace the paragraph beginning at line 13 on page 44 with the following:

• Published Catalog: On publishing, all the relevant information--classes applicable to the project/catalog, items ready to be published, ~~User~~ user (shopper) information and group information is published for the specified catalog. The required indexes for enabling full text search capabilities are created.

Please replace the paragraph beginning at line 19 on page 44 with the following:

- Delete Catalog: The ~~User~~ user selects the Catalog/Project to be deleted. This selected Catalog is marked for deletion. After Approval, the relevant actions are taken for the selected Catalog/Project.

Please replace the paragraph beginning at line 23 on page 44 with the following:

The IP address of the mail server and the email address to which the RFQ information should be sent. The time period after which a check for submissions and email approvers can also be configured. These are configurable and can be maintained using a set of ~~User~~ user interfaces.

Please replace the paragraph beginning at line 5 on page 49 with the following:

- Select Catalog: The ~~User~~ user selects the specific catalog to which classes have to be added or existing classes modified or deleted. The classification schema for the catalog is presented to the ~~User~~ user.

Please replace the paragraph beginning at line 8 on page 49 with the following:

- Add Class and Attributes: The ~~User~~ user creates classes that represent the classification schema for items. The ~~User~~ user "defines attributes" for each class. The class attributes can be selected from an available-list of attributes. Alternatively, the ~~User~~ user can add a new attribute for the class. The new attribute then gets added to the list of available attributes for use in subsequent attribute definition. A list of values for a class attribute can be defined. The addition is submitted for approval before it is reflected in the schema.

Please replace the paragraph beginning at line 15 on page 49 with the following:

- Attribute Inheritance: A class automatically inherits the attributes of its parent. A maximum of 30 attributes (including inherited attributes) can be defined for a class. When a class is copied or moved under some other class, only the non-inherited attributes of the class are copied. The

new class thereupon inherits attributes from its new parent. If duplicate attributes for the new class are created as a result of this, the ~~User~~ user is notified of this during the copy operation itself, and the duplicate attribute is copied in the new class. The ~~User~~ user can take appropriate actions for duplicate attributes, if required.

Please replace the paragraph beginning at line 23 on page 49 with the following:

• Edit Class Attributes: The ~~User~~ user modifies the class attribute of the required class. New class attributes can be added to the existing class. Existing class attribute information can be modified or the attribute can be deleted. The change is submitted for approval before it is reflected in the schema.

Please replace the paragraph beginning at line 27 on page 49 with the following:

• Copy/Move Classes and Items: The ~~User~~ user can copy or move classes across schema branches and for easy replication of schema parts. Copying or moving a class also copies or moves all the items under that class along with it. The ~~User~~ user may also explicitly select items under a class and copy/move only the selected items to some other class. These changes are submitted for approval before they are reflected in the project. Items reflect their new parent class after approval.

Please replace the paragraph beginning at line 2 on page 51 with the following:

• Item Maintenance involves addition/deletion of items that are marked as "Shipped" and editing details of existing catalog items. The Item Maintenance is allowed to operate only on items whose status is "Shipped". Associations between identical items under different classes can also be defined during the maintenance process. Any change to the catalog items is a "submission" for approval. After approval the change can be effected in the production area. A set of Catalog Browser-like GUI's enables this functionality. Appropriate pricing information of the item is also presented in the detailed item view. The ~~User~~ user is associated with one or more product views of the catalog/project. The ~~User~~ user performs actions on the catalog/project through the product views. The ~~User~~ user is able to switch between product views without

logging in again.

Please replace the paragraph beginning at line 11 on page 51 with the following:

• Add Rich Content Item: The ~~User~~ user navigates the classification structure of the product view. The ~~User~~ user selects an appropriate class and adds the item directly under this class. The ~~User~~ user populates item details. The ~~User~~ user uploads an image for the item. Thumbnails for the image are generated automatically. The ~~User~~ user can also attach PDF files, documents, text files or images to the item. A maximum of five attachments are permissible. This new item is marked as a "Maintained" item and is submitted for approval before it is reflected in the catalog. The ~~User~~ user is able to add item-specific attributes while adding the item. This is allowed if the class attributes have not reached the maximum allowable limit of 30 attributes.

Please replace the paragraph beginning at line 20 on page 51 with the following:

• Edit Rich Content Item: Existing catalog items can be selected from the product view in a similar manner and modified or normalized by the ~~User~~ user using the same functions. This modified item is marked as a "Maintained" item and submitted for approval before the change is reflected in the catalog.

Please replace the paragraph beginning at line 27 on page 51 with the following:

• Define Item Association: The ~~User~~ user is allowed to associate a catalog item to multiple schema classes. An item under a class of a catalog may be associated to any class of any catalog. An item associated with multiple classes is accessible from all associated classes. The reference of all associating classes is stored against the item. The item is marked as "Maintained" and submitted for approval before it is reflected in the catalog.

Please replace the paragraph beginning at line 4 on page 52 with the following:

• Define Currency Formats: The ~~User~~ user "defines currency formats" for each currency. The ~~User~~ user specifies the currency code, name, symbol, prefix, suffix, thousand separators, decimal separator and decimal precision to be used to format amounts of the stated currency. The ~~User~~

user modifies or deletes existing currency formats based on specific requirements.

Please replace the paragraph beginning at line 9 on page 52 with the following:

• Search Items: The ~~User~~ user can alternatively search the product view for specific keywords or using parametric search. Based on search results, the ~~User~~ user selects a class and have a view of the existing items under that class. The ~~User~~ user can then add the item under the selected class.

Please replace the paragraph beginning at line 16 on page 52 with the following:

• Select Class: The class hierarchy is presented to the ~~User~~ user with Catalog Browser like navigational capabilities. The ~~User~~ user selects a class.

Please replace the paragraph beginning at line 18 on page 52 with the following:

• Select Item: The ~~User~~ user ccessories are to be added.

Please replace the paragraph beginning at line 19 on page 52 with the following:

• Add Accessories: The class hierarchy is presented to the ~~User~~ user again. The ~~User~~ user selects a class and the corresponding item list is displayed. The ~~User~~ user can select specific items from the available list as accessories to the selected item. The ~~User~~ user defines the specific type of association (Component, Cross-Selling, Accessory, Replacement Part) and the quantity of the accessory item.

Please replace the paragraph beginning at line 24 on page 52 with the following:

• Edit Accessories: Similarly, the ~~User~~ user can select an item and modify its accessory list or delete items from the accessory list.

Please replace the paragraph beginning at line 2 on page 53 with the following:

• Synonyms are alternate words that are used for identifying a class or an item in a full text search. During a full text search the ~~User~~ user inputs a string or pattern that is evaluated against

these synonyms. The classes and items whose synonyms match the search string/pattern are included in the search result.

Please replace the paragraph beginning at line 12 on page 53 with the following:

- Edit/Delete Synonyms: The ~~User~~ user selects the class to edit/delete synonyms. The synonyms for that class are presented to the ~~User~~ user as a list. The ~~User~~ user edits or deletes the synonyms as required. When class level synonyms are edited or deleted the effect is cascaded to all children items.

Please replace the paragraph beginning at line 16 on page 52 with the following:

- Search Using Synonyms: The ~~User~~ user can input a string or a pattern when searching for items or for a class. This string or pattern is matched against the synonyms of all the classes and items, and wherever matches occur, those items and classes is included in the search result.

Please replace the paragraph beginning at line 21 on page 53 with the following:

- While adding or editing an item, the item data may contain raw, non-descriptive and incomplete information. In such cases, the ~~User~~ user needs to normalize the item data using "find/replace" and "spell-check" features.

Please replace the paragraph beginning at line 24 on page 53 with the following:

- Find & Replace: The ~~User~~ user specifies words to be found and replaced in the data fields using "find/replace" features.

Please replace the paragraph beginning at line 26 on page 53 with the following:

- Spell Check: The data can be validated and normalized using "spell-check" features. A custom dictionary can be maintained based on projects. The ~~User~~ user uses this custom dictionary for performing spell check on the product details. The ~~User~~ user changes case on text fields.

Please replace the paragraph beginning at line 3 on page 57 with the following:

• The published catalog is available online with GUI based navigational functionality. The functionality of the existing Catalog Browser WEB application is replicated. The Catalog Browser Navigator provides GUI based navigational capabilities. The shopper used the Navigator to navigate to the desired product, search by giving keywords, search based on parameters, compare products, request quote for non-catalog items and add catalog items to the shopping cart. The administrative ~~User~~ user of the Navigator is able to view predefined reports. The shopper is able to view catalogs that are available to the specific ~~User~~ user group that the shopper belongs to.

Please replace the paragraph beginning at line 1 on page 59 with the following:

• The searches conducted and search results are logged for reporting purposes. The administrative ~~User~~ user of the Navigator is able to view a "Best Selling Items" report, an "Unavailable Items" report and a "Search Results" report. The Best Selling Items report lists best selling items over a defined time frame. The ~~User~~ user changes the time frame to view the best selling items based on other time frames. The Search Results report presents information regarding "successful" and "unsuccessful" searches performed by shoppers in the navigator. An option to view the reports in a printer-friendly format is provided.

Please replace the paragraph beginning at line 20 on page 61 with the following:

• Data Syndication consists of exporting catalogs to various customers. An entire catalog or a specific product view of the catalog can be exported to a customer. A set of wizard-like GUI screens is provided to facilitate export. The ~~User~~ user specifies the ~~User~~ user group (shopper) and the catalog for syndication.

Please replace the paragraph beginning at line 2 on page 62 with the following:

• During Data Syndication, the ~~User~~ user is presented with a wizard-like GUI to select or define new syndication template, customize outgoing templates for schema and items, to specify

catalogs to be exported and to map outgoing templates for schema and items. Syndication templates, including rules, can be copied, modified and saved for a new customer. These syndication templates can be reused.

Please replace the paragraph beginning at line 7 on page 62 with the following:

- Select Customized Outgoing Templates: The ~~User~~ user selects two files from a folder on the server to serve as the outgoing schema and item file templates. These files are in any of the four formats (XML, MS Excel, CSV, MS Access).

Please replace the paragraph beginning at line 10 on page 62 with the following:

- Select Catalog: The ~~User~~ user selects the catalog and specific product view to which the selected outgoing templates are assigned.

Please replace the paragraph beginning at line 12 on page 62 with the following:

- Map Outgoing Templates: Each template file is read and the fields of the template are presented to the ~~User~~ user against the standard content database structure. The ~~User~~ user maps each field of the outgoing template with the standard database fields. The process allows the ~~User~~ user to map the structure of the incoming file for exporting the content in same format. These maps are saved for later re-use.

Please replace the paragraph beginning at line 18 on page 62 with the following:

- During catalog export, the ~~User~~ user is presented with wizard-like GUI to select catalog or product view to export, to select export file type, to select export type--full export or delta export, to replace outgoing words and to enable price calculation. A log of each export process is maintained to enable delta comparison and tracking.

Please replace the paragraph beginning at line 22 on page 62 with the following:

- Select Catalog to Export: To export content, the ~~User~~ user selects the catalog and a product view for the catalog. Product views allow part of the catalog to be exported. The existing export

templates are used. The ~~User~~ user specifies the file format (MS Access, Excel, CSV or XML), name and location.

Please replace the paragraph beginning at line 26 on page 64 with the following:

• The images and linked documents of the items are exported to folder specified by the ~~User~~ user. The images and linked documents are bundled in a compressed "jar" file.

Please replace the paragraph beginning at line 28 on page 62 with the following:

• Select Export Type: The ~~User~~ user specifies the export type--"Delta" or "Complete". In case of delta exports, selected items for the product view is compared against a previous export of the same product view. The comparison yields a list of unchanged items, new items or modified items. The ~~User~~ user can view details of each type.

Please replace the paragraph beginning at line 4 on page 63 with the following:

• Replace Words: The selected class structure is presented to the ~~User~~ user. The ~~User~~ user can specify words to be searched and replaced in the attribute values of a specified class. The ~~User~~ user selects the class, select the attribute and define the words to be replaced. The defined words are searched and replaced in the specified attribute value or entire catalog. The defined words are added to list of rules for that class and catalog. These rules are used during next syndication of that catalog. The ~~User~~ user is provided with a list of existing replace words for selected class. From this list, ~~User~~ user can either select the words to be replaced or can define new replace words. Replace words can be defined as literal or as interpretive by providing the pattern builder to define find and replace words.

Please replace the paragraph beginning at line 14 on page 63 with the following:

• Price Calculations: The syndication process enables price calculation based on ~~User~~ user selection. The list price of the item is replaced by the calculated price of the item. The price is calculated at the time of syndication as per the price markups and promotional price defined for the item. The quantity based price breakup information for each item is exported as a separate

file wherever applicable.

Please replace the paragraph beginning at line 21 on page 53 with the following:

- Synonym Export: The syndication process enables export of class synonyms based on ~~User~~ <u>user</u> selection. The class synonyms are exported in a separate file.

Please replace the paragraph beginning at line 24 on page 53 with the following:

- The ~~User~~ <u>user</u> can use audit reports to view details about each export process. An option to view the report in a printer-friendly format is provided.